Session: 2023/24

Title of Module: Bioscience Research Project			
Code: BIOL10006	**SCQF Level: 10 (Scottish Credit and Qualifications Framework)**	**Credit Points: 40**	**ECTS: 20 (European Credit Transfer Scheme)**
School:	School of Health and Life Sciences		
Module Co-ordinator:	Gary Litherland		

Summary of Module
A supervised introduction to biological scientific research in order to develop independent problem solving skills, providing students with analogues of professional research practice. To develop/refine critical analytical skills through exposure of a range of research paradigms over a variety of ethical and biological topics. To apply skills learned across the breadth of biology-related provision in the design, conduct, analysis and presentation of a data-based project spanning two semesters, producing thereby a literature review, logbook and project report in the form of a concise scientific paper, or multimedia format. This module is also suitable for students wishing to engage with biological aspects of research. In this module you will gain graduate attributes. These are the skills, personal qualities and understanding to be developed through your university experience that will prepare for life and work in the 21st century. As a graduate from UWS you will be: • Universal - globally relevant with comprehensively applicable abilities, skills and behaviours • Work ready - dynamic and prepared for employment in complex, ever-changing environments which require lifelong learning and resilience • Successful - as a UWS graduate with a solid foundation on which to continue succeeding and realising my potential, across various contexts Through studying and graduating from UWS, you will develop attributes across three dimensions: • Academic - knowledge, skills and abilities related to high-level academic study • Personal - qualities and characteristics of well-rounded, developed, responsible individuals • Professional - skills, aptitudes and attitudes required for professional working life in the 21st Century

Module Delivery Method

Face-To-Face	Blended	Fully Online	HybridC	Hybrid 0	Work-Based Learning
☒	☐	☐	☒	☐	☐

See Guidance Note for details.

Campus(es) for Module Delivery

The module will **normally** be offered on the following campuses / or by Distance/Online Learning: (Provided viable student numbers permit) (tick as appropriate)

Paisley:	Ayr:	Dumfries:	Lanarkshire:	London:	Distance/Online Learning:	Other:
☒	☐	☐	☒	☐	☐	Add name

Term(s) for Module Delivery

(Provided viable student numbers permit).

Term 1	☒	Term 2	☒	Term 3	☐

Learning Outcomes: (maximum of 5 statements)
These should take cognisance of the SCQF level descriptors and be at the appropriate level for the module.
At the end of this module the student will be able to:

L1	Acquire experience of researching an identified biological question using knowledge and understanding acquired in the programme
L2	Prepare an independent critical review of literature in order to identify an agreed testable question and develop/refine critical analytical skills by engaging with a range of ethical and biologically-related research models.
L3	Collect, collate and analyse data in a scientific manner
L4	Develop skills and gain experience relevant to the experimental and/or theoretical aspects of the problem posed, including modification and redesign to address emerging issues and to report results both orally and in the form of a concise scientific paper.
L5	Act autonomously, or with little guidance, to devise and sustain an independent project to develop new areas of knowledge and skills as necessary

Employability Skills and Personal Development Planning (PDP) Skills

SCQF Headings	During completion of this module, there will be an opportunity to achieve core skills in:
Knowledge and Understanding (K and U)	SCQF Level **10** To develop detailed knowledge and understanding in a specialized area, informed by or at the forefront of the subject/discipline. Knowledge and understanding of a range of established techniques of enquiry and/or research methodologies.
Practice: Applied Knowledge and Understanding	SCQF Level **10** Execute a defined project of research to derive relevant outcomes. Practice in a range of professional contexts that exhibit uncertain outcomes. Use skills, practices or materials which are specialized, advanced, or at the forefront of a subject or discipline.
Generic Cognitive skills	SCQF Level **10** Critically identify, define, conceptualise, and analyse complex/professional level problems and issues. Critically review and consolidate knowledge, skills and practices. Demonstrate some originality during project implementation.
Communication, ICT and Numeracy Skills	SCQF Level **10** Use a wide range of routine skills in addition to some advanced and specialised skills. Use a range of software to analyse data and produce a professional report, including interpretation. Use and evaluation of a wide range of numerical and graphical data.
Autonomy, Accountability and Working with others	SCQF Level **10** Exercise autonomy and initiative during the project work. Exhibit awareness of responsibilities in a multi-user environment e.g. a laboratory. Work effectively with project supervisor. Demonstrate an awareness of current ethical issues and adopt a professional code of conduct. Utilising supervision effectively to progress study.

	Working independently to meet learning outcomes.	
Pre-requisites:	Before undertaking this module the student should have undertaken the following:	
	Module Code:	**Module Title:**
	Other:	Pre Requisites - The student must fulfil the entry qualifications to the appropriate Honours Programme. Co-Requesit - Complementary programme
Co-requisites	**Module Code:**	**Module Title:**

*Indicates that module descriptor is not published.

Learning and Teaching	
This module will require the student to undertake an investigation of a research-based topic in bioscience. A review of the literature will be prepared and a practical investigation carried out to generate data for analysis. In some cases a non-laboratory based topic may be investigated. A final report will be prepared to present the findings and conclusions of the research project.	
Learning Activities During completion of this module, the learning activities undertaken to achieve the module learning outcomes are stated below:	**Student Learning Hours** (Normally totalling 200 hours): (Note: Learning hours include both contact hours and hours spent on other learning activities)
Laboratory/Practical Demonstration/Workshop	228
Tutorial/Synchronous Support Activity	12
Personal Development Plan	3
Independent Study	157
	400 Hours Total
**Indicative Resources: (eg. Core text, journals, internet access)	

The following materials form essential underpinning for the module content and ultimately for the learning outcomes:

Dedicated VLE.

Access to primary literature is essential. Key references for each project will be provided by Project Supervisor.

Specialized reference material, books and online databases necessary for individual projects

(**N.B. Although reading lists should include current publications, students are advised (particularly for material marked with an asterisk*) to wait until the start of session for confirmation of the most up-to-date material)

Attendance and Engagement Requirements

In line with the Student Attendance and Engagement Procedure: Students are academically engaged if they are regularly attending and participating in timetabled on-campus and online teaching sessions, asynchronous online learning activities, course-related learning resources, and complete assessments and submit these on time.

For the purposes of this module, academic engagement equates to the following:

Attendance at synchronous sessions (meetings with supervisor(s), tutorials, Health and safety and laboratory induction and practicals), completion of asynchronous activities, and submission of assessments to meet the learning outcomes of the module.

Equality and Diversity

The University's Equality, Diversity and Human Rights Procedure can be accessed at the following link: UWS Equality, Diversity and Human Rights Code.

In line with current legislation (Equality Act, 2010) and the UWS Equality, Diversity, and Human Rights Code, our modules are accessible and inclusive, with reasonable adjustment for different needs where appropriate. Module materials comply with University guidance on inclusive learning and teaching, and specialist assistive equipment, support provision and adjustment to assessment practice will be made in accordance with UWS policy and regulations. Where modules require practical and/or laboratory-based learning or assessment required to meet accrediting body requirements the University will make reasonable adjustment such as adjustable height benches or assistance of a 'buddy' or helper.

Please refer to the UWS Equality and Diversity Policy at the following link: https://www.uws.ac.uk/about-uws/uws-commitments/equality-diversity-inclusion/

	(N.B. Every effort will be made by the University to accommodate any equality and diversity issues brought to the attention of the School)

Divisional Programme Board	Biological Sciences and Health
Assessment Results (Pass/Fail)	Yes ☐ No ☒
School Assessment Board	Biology
Moderator	Andrew MacKenzie
External Examiner	A Tsaousis
Accreditation Details	This module is part of the BSc (Hons) Biomedical Science programme; accredited by Institute of Biomedical Science (IBMS) and approved by Health & Care Professions Council (HCPC) as part of BSc (Hons) Applied Biomedical Science programme. This module is part of the BSc (Hons) Applied Bioscience and BSc (Hons) Applied Bioscience with Forensic Investigation programmes; accredited by Royal Society of Biology (RSB).
Changes/Version Number	5.04

Assessment: (also refer to Assessment Outcomes Grids below)
Assessment 1 – Term 1 - Literature review, Project practical work to be continued into Term 2 (30%)
Assessment 2 – Term 2 - Project conduct & logbook (10%), Oral presentation (10%), Final report (50%)
(N.B. (i) **Assessment Outcomes Grids** for the module (one for each component) can be found below which clearly demonstrate how the learning outcomes of the module will be assessed. (ii) An **indicative schedule** listing approximate times within the academic calendar when assessment is likely to feature will be provided within the Student Module Handbook.)

Assessment Outcome Grids (See Guidance Note)

Component 1

Assessment Type (Footnote B.)	Learning Outcome (1)	Learning Outcome (2)	Learning Outcome (3)	Learning Outcome (4)	Learning Outcome (5)	Weighting (%) of Assessment Element	Timetabled Contact Hours
Dissertation/ Project report/ Thesis	✓	✓	✓		✓	30	0

Component 2

Assessment Type (Footnote B.)	Learning Outcome (1)	Learning Outcome (2)	Learning Outcome (3)	Learning Outcome (4)	Learning Outcome (5)	Weighting (%) of Assessment Element	Timetabled Contact Hours
Dissertation/ Project report/ Thesis	✓	✓	✓	✓	✓	50	0
Report of practical/ field/ clinical work	✓	✓	✓	✓	✓	10	0
Presentation	✓	✓	✓	✓	✓	10	4
Combined Total for All Components						**100%**	**4 hours**